



SEEDS

for the

NURSERYMAN

AND

FORESTER

1957 - 1958

F. W. SCHUMACHER

HORTICULTURIST

SANDWICH, MASS.

Telephone SAGAMORE 659

TERMS

Deliveries are subject to yield of crops and safe arrival of consignments.

It is not possible to have all items listed available at all times. A number of perishable seeds cannot be stored successfully and must be ordered in season. All seeds are offered subject to crop failures or short supplies.

Seeds are sold without warranty, expressed or implied as to description and productiveness. **Goods** should be carefully inspected upon arrival and claims for conditions made at once. We cannot consider claims after seeds have been stored or planted.

All shipments travel at buyer's risk and claims for damages in transit must be taken up with carriers.

CAUTION — While it is true that plants grown from seed of horticultural varieties often yield superior plant material in comparison to that grown from nondescript seed, we wish to emphasize that seeds of such varieties or hybrids, with few exceptions, cannot be expected to come true to name. They are offered here for the convenience of competent plantsmen, for research and breeding work only.

CUSTOMERS OTHER THAN PROFESSIONALS — please note that their orders for pound lots will be handled in line with all others. Orders for small quantities of assorted items must wait their turn to be filled after arrival of respective items from sources. We suggest that such orders be placed with us prior to March 1st. During the busy spring and fall shipping seasons orders for small amounts of seeds cannot be filled promptly. Please confine correspondences concerning small orders to the most necessary and attach a stamped return envelope if your inquiry does not concern an order. The right is reserved to return orders received in excess of our facilities.

PRICES — subject to change without notice, are f.o.b. Sandwich, Mass.

PAYMENT — for customers of approved credit upon receipt of invoice. A cash discount of 3% is allowed on all orders amounting to \$10.00 or more. For orders or shipments requested for less than \$5.00, please remit \$.50 extra for handling. Please include postal and packing charges in your remittance. 10% for orders in pound lots or over.

ORDERING — We request that written orders be a separate part of any correspondence and clearly show amount and price of each item listed. Quantities smaller than listed cannot be supplied.

ABBREVIATION — N. E. stands for New England seed, a sign of hardiness; d.b. for dried berries; d.h. for dried hips; asterisk (*) denotes new or insufficiently known plants of merit; **CERT.** for seeds certified to us as to origin by sources of long standing.

WE ARE IN THE MARKET FOR TREE AND SHRUB SEEDS OF ALL KINDS.

	oz.	$\frac{1}{4}$ lb.	lb.
ABIES alba (pectinata) .....		.90	2.50
<i>amabilis</i>		2.30	6.25
<i>balsamea</i> , Lake States		1.75	5.00
<i>balsamea</i> , New York State		2.25	6.25
<i>cephalonica</i>		1.10	3.00
<i>cilicica</i>		1.20	3.25
<i>concolor</i> , California (<i>lowiana</i>)		1.85	5.00
<i>concolor</i> , Colorado		1.65	4.50
<i>firma</i>		1.10	3.00
<i>grandis</i>		2.35	6.50
<i>homolepis</i>		1.40	4.00
<i>magnifica</i>		2.00	5.75
<i>mariesi</i>		1.10	3.00
<i>nordmanniana</i> ,		1.20	3.25
<i>pinsapo</i> .....		.90	2.35
<i>pinsapo glauca</i>		1.10	3.00
<i>procera</i> (<i>nobilis</i>)		2.35	6.50
<i>sachalinensis</i>		1.85	5.00
<i>veitchi</i>		1.40	4.00
ACACIA armata	1.50	4.50	
<i>baileyana</i> .....	.50	1.35	3.75
<i>cultriformis</i>	1.00	2.70	7.50
<i>cyanophylla</i> .....	.50	.90	2.50
<i>cyclops</i> .....	.60	1.65	4.50
<i>decurrens</i> .....	.50	1.10	3.00
<i>decurrens dealbata</i> .....	.50	1.00	2.75
<i>decurrens dealbata</i> , fast growing cultural selection .....	.65	1.75	5.00
<i>decurrens mollis</i> (<i>mollissima</i>) .....	.40	.85	2.25
<i>farnesiana</i> .....	.50	1.00	2.75
<i>greggi</i> .....	.85	2.35	6.50
<i>horrida</i> .....	.50	1.25	3.50
<i>longifolia</i> .....	.60	1.65	4.50
<i>melanoxyton</i> .....	.50	1.25	3.50
<i>pycnantha</i> .....	.50	1.30	3.75
<i>retinodes floribunda</i> .....	.60	1.50	4.25
<i>saligna</i> .....	.45	.70	2.00
ACANTHOPanax spinosus		1.70	4.75
ACER argutum		1.65	4.50
<i>campestre</i> .....		.45	1.00
<i>carpinifolium</i>		2.20	6.00
<i>crataegifolium</i>		1.40	4.00
<i>ginnala</i>		1.10	3.00
<i>japonicum</i>		1.50	4.25
<i>monspessulanum</i> .....		.70	2.00
<i>negundo</i> .....		.50	1.00
<i>palmatum</i> , small seeded		1.65	4.50
<i>palmatum</i> , from garden specimens		1.35	3.75
<i>palmatum atropurpureum</i>	1.00	2.75	7.50
<i>palmatum atropurpureum dissectum</i>	1.75	4.50	12.00
<i>platanoides</i> .....		.50	1.25
<i>rubrum</i> , Northern crop		2.00	
<i>rufinerve</i>		1.40	4.00
<i>saccharum</i> .....		.90	2.50
<i>spicatum</i>		1.50	4.25

	oz.	1/4 lb.	lb.
AILANTHUS altissima (glandulosa)		1.00	
AKEBIA quinata	1.10	3.00	
lobata	1.10	3.00	
ALBIZZIA julibrissin .....	.50	1.00	
julibrissin rosea	1.20	3.25	
lophanta	1.00	2.75	
AMELANCHIER alnifolia, clean	2.25	6.60	18.00
canadensis, clean	2.00	6.00	
canadensis, d.b.		1.75	5.00
AMPELOPSIS (see also <i>Parthenocissus</i>) <i>aconitifolia</i> , N.E., d.b.	1.00		
brevipedunculata (<i>heterophylla</i>) clean	1.10	3.00	
AMORPHA canescens	1.25	3.50	
fruticosa .....	.50	1.25	
microphylla (nana) .....	.50	1.25	
ARALIA chinensis	2.25	6.25	
elata	1.75	5.00	
spinosa, d.b.	1.10	3.00	
ARBUTUS unedo, clean	1.10	3.00	
ARCTOSTAPHYLOS glauca	1.20	3.25	
manzanita, d.b.	1.10	3.00	
urva ursi, clean	2.20	6.00	
ARDESIA crenulata	1.75	5.00	
japonica	2.35	6.50	
ARECASTRUM romanoffianum (<i>Cocos plumosa</i>)			
250 seeds 1.50 — 1,000 seeds 5.00			
ARISTOLOCHIA tomentosa	1.40	4.00	—
ARONIA arbutifolia, d.b. ....	.90	2.50	
arbutifolia brilliantissima, d.b.	1.10	3.00	
melanocarpa, clean	2.50	7.00	
melanocarpa, d.b. ....	.65	1.75	
ASIMINA triloba .....	.90	2.50	
AZALEA albrechtii	1.00	3/2 oz.	
arborescens, N. E.	1.00	1/16 oz., 3.00	1/4 oz.
atlantica .....	.75	pkt.	
calendulacea .....	.75	1/16 oz., 1.50	1/4 oz.
calendulacea rosea	1.00	1/16 oz., 3.00	1/4 oz.
indica (macrantha) .....	.75	1/8 oz.	
japonica (hardy mollis) from specialist's collection	1.25	1/16 oz., 3.00	1/4 oz.
japonica, yellow flowered, domestic seed	1.00	3/2 oz., 3.00	1/8 oz.
kaempferi (see under obtusa)			
maxwellii, N. E. ....	.75	pkt.	
mollis (true mollis)	1.25	1/16 oz., 3.00	1/4 oz.
mucronata (ledifolia alba) white, N. E. ....	.75	pkt., 1.25	3/2 oz.
mucronata amethystina .....	.75	, 1.25	3/2 oz.
mucronulata, N. E. measured packets of about 700 seeds	1.25	pkt., 2.50	1/16 oz., 7.50
nudiflora .....	.75	1/16 oz., 1.50	1/4 oz.
obtusa japonica (kiusiana,) domestic, N. E.	1.00	pkt.	
obtusa kaempferi, home grown, N.E. 1.00	1/16 oz., 3.50	1/4 oz.	
obtusa kaempferi, tall red flowered selection	1.00	pkt., 1.50	3/2 oz.

AZALEA (continued)oz. $\frac{1}{4}$ lb. lb.

<i>obtusa kaempferi</i> , low spreading type, red flowers	
	1.00 pkt., 1.50 $\frac{1}{2}$ oz.
<i>pennsylvanica</i>	1.00 pkt.
<i>pontica</i>	1.00 $\frac{1}{16}$ oz., 1.75 $\frac{1}{4}$ oz.
* <i>poukhanensis</i> , N. E.	1.25 $\frac{1}{2}$ oz., 3.00 $\frac{1}{8}$ oz.
<i>rosea</i>	1.00 $\frac{1}{16}$ oz., 3.00 $\frac{1}{4}$ oz.
<i>schlippenbachii</i> , Korean strain, N.E.	1.00 $\frac{1}{16}$ oz., 2.00 $\frac{1}{4}$ oz.
<i>vaseyi</i>	1.00 $\frac{1}{16}$ oz., 2.75 $\frac{1}{4}$ oz.
<i>viscosa</i>	1.00 $\frac{1}{16}$ oz., 2.25 $\frac{1}{4}$ oz.

(See listing of Hybrid varieties on pages

BAUHINIA <i>purpurea</i>	1.75 5.00
<i>purpurea alba</i>	1.85 5.50
BERBERIS <i>juliana nana</i> , d.b.	1.00 $\frac{1}{4}$ oz.
<i>thunbergii</i> , clean	1.75 5.00
<i>thunbergii</i> , thornless, d.b.	1.00 2.75
<i>thunbergii atropurpurea</i> , N. E. d.b.	1.00 2.75 7.50
<i>thunbergii atropurpurea</i> , clean	2.00 5.50 15.00
BETULA <i>japonica</i>	1.15 3.25
<i>lenta</i> , clean	1.00 2.75 7.50
<i>lutea</i> , clean	1.25 3.50 10.00
<i>papyrifera</i> , clean, N. E.	1.75 4.50 12.00
<i>papyrifera minor</i> , N. E.	1.50 4.25
<i>pendula</i> (<i>alba</i>) .....	.50 1.25
<i>pendula</i> (<i>alba</i>), clean .....	.90 2.50
<i>pendula</i> (<i>alba</i>), seed from northern limit, clean	1.10 3.00
<i>populifolia</i> , clean	1.00 2.80 8.00
BROUSSONETIA <i>papyrifera</i>	1.00 2.75 7.50
BUDDLEIA <i>davidi</i> (<i>variabilis</i>)	1.50 4.25
<i>davidi</i> , from new garden forms	2.00
<i>davidi</i> , white	2.00
<i>japonica</i>	2.00
BUTIA <i>capitata</i> (<i>Cocos australis</i>)	1.20 3.25
BUXUS <i>microphylla japonica</i>	2.35 6.50
<i>microphylla koreana</i>	1.00 $\frac{1}{4}$ oz.
<i>sempervirens</i> .....	.90 2.50
CALLICARPA <i>dichotoma</i> (<i>purpurea</i>)	2.80 8.00
<i>japonica</i>	1.50 2.75 7.50
CALLUNA <i>vulgaris</i> , clean	1.00 $\frac{1}{4}$ oz.
CALYCANTHUS <i>floridus</i>	2.00
<i>occidentalis</i>	1.10 3.00
<i>occidentalis</i>	1.75 5.00
CAMELLIA <i>japonica</i> , Japan, from wild plants .....	.80 2.25
<i>japonica</i> , from garden specimens, Japanese collection...	.90 2.50
<i>japonica</i> from garden specimens, European collection...	.90 2.50
<i>reticulata</i>	1.75 5.00
<i>sasanqua</i> .....	.90 2.50
CAMPsis (<i>Bignonia</i>) <i>grandiflora</i>	1.20 3.25
<i>radicans</i>	1.10 3.00
CARAGANA <i>arborescens</i> .....	.80 2.25
CARPINUS <i>betulus</i> , clean .....	.50 1.25
<i>caroliniana</i> , clean	1.50 4.25
<i>japonica</i>	1.75 5.00
<i>taxiflora</i>	1.50 4.25

	oz.	1/4 lb.	lb.
CARYA illinoensis (Pecan) .....			.90
laciniosa per bushel (50 lbs.)	21.00		
ovata per bushel (50 lbs.)	20.00		
CARYOPTERIS clandonensis , clean	1.00	1/8 oz.	
CASSIA artemisioides		2.75	
floribunda		1.75	
tomentosa		2.10	
CATALPA bignonioides .....		.50	1.20
ovata .....		.75	2.00
speciosa		1.00	2.75
CEANOTHUS americanus .....	.80	2.20	6.00
arboreus		1.50	
arboreus hybrids		1.50	
cyaneus		1.65	
griseus horizontalis		1.25	
integerimus		1.25	
megacarpus		1.50	
olivaceus tomentosus		2.50	
purpureus		2.50	
spinosus		1.50	
thyrsiflorus		1.25	
verrucosus		1.50	
CEDRUS atlantica	1.50	4.25	
atlantica argentea	1.65	4.50	
atlantica glauca	1.70	4.75	
deodara	1.20	3.25	
libani	1.30	3.75	
CELASTRUS orbiculatus , clean	1.40	4.00	
scandens, clean	1.85	5.50	
scandens, d.b.	1.00	2.75	
CELTIS mississippiensis (laevigata), d.b. .....	.90	2.50	
occidentalis, d.b. .....	.70	2.00	
CEPHALANTHUS occidentalis , clean .....	.75	2.10	
CEPHALOTAXUS drupacea .....	.65	1.75	
fortuni .....	.65	1.85	
CERATONIA siliqua .....	.45	1.25	
CERCIDiphyllum japonicum	1.50	3.35	9.00
CERCIS canadensis , Northern seed	1.15	3.25	
canadensis, Southern seed	1.00	2.75	
chinensis	1.65	4.50	
occidentalis	1.40	4.00	
siliquastrum .....	.50	1.20	
siliquastrum alba	1.00	2.75	
CHAENOMELES japonica (maulei) (dwarf type)	1.50	4.25	
lagenaria (Cydonia japonica, bush type)	1.75	5.00	
CHAMAECYPARIS lawsoniana .....	.90	2.50	
lawsoniana allumi, blue, columnar shaped form	1.30	3.75	
lawsoniana argentea	1.10	3.00	
lawsoniana aurea	1.25	3.50	
lawsoniana pendula glauca	1.25	3.50	
lawsoniana pyramidalis	1.10	3.00	
lawsoniana Triumph de Boskoop, choice blue form	1.30	3.75	

	oz.	1/4 lb.	lb.
CHAMAECYPARIS (continued)			
<i>obtusa</i>	.115	3.25	
<i>pisifera</i>	.135	3.75	
<i>pisifera filifera</i>	.165	4.50	
<i>pisifera plumosa</i>	.175	5.00	
<i>thyoides glauca</i>	.100 1/4 oz.	2.50	
CHAMAEROPS <i>humilis</i>	.50	1.25	
CHILOPSIS <i>linearis</i>	2.35	6.50	
CHIMONANTHUS (Meratia) <i>praecox</i>	1.00	2.75	
CHIONANTHUS <i>virginica</i> , clean	1.65	4.50	
CINNAMOMUM <i>camphora</i>	.65	1.80	
<i>glanduliferum</i>	.60	1.50	
CLADRASTIS <i>lutea</i>	1.65	4.50	
<i>platycarpa</i>	2.00		
CLEMATIS <i>paniculata</i> , imported	1.65	4.50	
<i>patens</i>	2.20	6.00	
<i>virginiana</i>	1.10	3.50	
<i>viticella</i>	.90	2.50	
CLERODENDRON <i>trichotomum</i>	1.10	3.00	
CLETHRA <i>acuminata</i> , clean	2.00 1/4 oz.		
<i>alnifolia</i> , N. E., clean	1.50 1/4 oz.	4.00	
<i>barbinervis</i> , clean	1.50 1/4 oz.		
<i>fargesi</i> , clean	1.00 pkt.		
COCCULUS <i>carolinus</i>	.70	2.00	
COLUTEA <i>arborescens</i>	.65	1.75	
CORDYLINE (Dracaena) <i>indivisa</i>	1.00	2.85	
CORNUS <i>alba</i>	1.65	4.50	
<i>amomum</i> , clean	1.25	3.50	
<i>capitata</i>	.80	2.25	
<i>controversa</i>	1.30	3.75	
<i>florida</i> , Southern, clean	1.25	3.50	
<i>florida</i> , climatic Zone 6, clean	1.30	3.75	
<i>florida</i> , N. E., Zone 5, clean	1.40	4.00	
<i>florida</i> , from Redflowering Dogwood, d.b.	1.40	4.00	
<i>kousa</i> , clean	1.40	4.00	
<i>kousa chinensis</i> , N. E.	1.50		
<i>mas</i> , clean	.60	1.50	
<i>nuttalli</i> , d.b.	1.25	3.50	
<i>officinalis</i> , clean	1.50	4.25	
<i>racemosa</i> (<i>paniculata</i>), clean	1.10	3.00	
<i>racemosa</i> (<i>paniculata</i>) d.b.	.60	1.50	
<i>sanguinea</i> , clean	.50	1.25	
<i>stolonifera</i> , d.b.	.65	1.75	
CORONILLA <i>emerus</i>	.60	1.50	
CORYLOPSIS <i>sinensis</i> , N. E.	1.00 1/4 oz.	2.50	
<i>spicata</i>	3.35	9.00	
CORYLUS <i>americana</i>	.90	2.50	
<i>avellana</i>	.50	1.25	

	oz.	¼ lb.	lb.
COTINUS coggygria (<i>Rhus cotinus</i>) .....		.70	2.00
COTONEASTER acutifolia , clean		3.50	10.00
<i>adpressa praecox</i> , d.b.	1.50	4.50	
<i>apiculata</i> , d.b.	1.75		
<i>bullata</i> , clean		1.75	5.00
<i>bullata floribunda</i> , d.b.	1.00	2.50	
<i>buxifolia</i> , clean		1.75	5.00
<i>dielsiana</i> , clean		2.20	6.00
<i>dielsiana elegans</i> , d.b.	1.50		
* <i>dielsiana major</i> , clean		2.00	5.75
<i>divaricata</i> , clean		1.70	4.75
<i>foveolata</i> , clean, N. E. better habit and foliage, more disease resistant than either Cot. acutifolia or lucida		2.20	6.00
<i>francheti</i> , clean		1.65	4.50
<i>horizontalis</i> , clean		1.65	4.50
<i>horizontalis perpusilla</i> , d.b.		1.25	
<i>horizontalis prostrata</i> (minor?) more refined than type, good for rock gardens, d.b.	1.50	4.50	
<i>integerrima</i> , d.b.		2.20	
<i>lindleyi</i>		1.70	4.75
* <i>multiflora</i> , d.b.		2.20	6.00
* <i>multiflora calocarpa</i> , d.b.		2.00	5.75
<i>nitens</i> , d.b.		2.00	
<i>pannosa</i> , clean		1.65	4.50
<i>racemiflora desfontainii</i> (<i>typica</i>), d.b.	1.00	2.50	
<i>racemiflora nummularia</i> (<i>Meyeri</i>), d.b.	1.25		
<i>racemiflora songarica</i> , d.b.	1.00		
<i>racemiflora veitchi</i> , clean		2.20	6.00
<i>rosea</i> , d.b.	1.50		
<i>salicifolia</i> , clean		1.75	5.00
<i>simonsi</i> , clean		1.75	5.00
<i>thymifolia</i> , d.b.		1.25	
<i>zabeli</i> , d.b.		2.00	
CRATAEGUS crus-galli , clean .....		.90	2.50
<i>mollis</i> , clean		1.10	3.00
<i>monogyna</i> (<i>oxyacantha mon.</i>) .....		.50	1.25
<i>oxyacantha</i> .....		.60	1.50
<i>punctata</i> , clean		1.40	4.00
CRYPTOMERIA japonica , European seed		1.10	3.00
<i>japonica</i> , Oriental seed		1.00	2.75
<i>japonica lobbi</i>		1.40	4.00
CUNNINGHAMIA lanceolata		1.50	4.25
CUPRESSUS arizonica (<i>glabra</i> or <i>bonita</i>) domestic seed from pyramid specimens		1.85	5.50
<i>arizonica</i> , imported seed, from plants in cultivation		1.25	3.50
<i>funebris</i>		1.10	3.00
<i>govenniana</i>		1.10	3.00
<i>lusitanica</i> (<i>glaucia</i>) .....		.90	2.50
<i>lusitanica benthami</i>		1.00	2.75
<i>macrocarpa</i>		1.65	4.50
<i>macrocarpa</i> , from garden specimens		1.75	5.00

CUPRESSUS (continued)

	oz.	$\frac{1}{4}$ lb.	lb.
macrocarpa, from northern sources, British Isles	2.20	6.00	
macrocarpa glauca	2.20	6.00	
sempervirens .....	.50	1.35	
sempervirens horizontalis .....	.50	1.25	
sempervirens stricta .....	.50	1.35	
torulosa	1.00	2.75	
torulosa majestica	1.20	3.25	
CYCAS revoluta 100 seeds 4.00			
CYDONIA (see also <i>Cheanotheles</i>) <i>oblonga</i> (<i>vulgaris</i>)	1.85	5.50	
CYTISUS hirsutus			
multiflorus	1.00	2.50	
*multiflorus, White Gem	1.00	2.50	
nigricans	1.50	1.75	5.00
purpureus	1.00	2.50	
scoparius .....	.60	1.50	
scoparius andeanus, yellow with crimson wing.	1.50	4.25	
scoparius andeanus hybrids (<i>dallimorei</i>), vari-colored flowers in pastel shades of yellow, rose and white			
	1.00 $\frac{1}{4}$ oz.	2.85	
DALBERGIA sissoo , tropical timber tree to 80 ft.	1.40	4.00	
DAPHNE <i>mezereum</i> , clean	1.25	3.50	
DEUTZIA scabra (<i>crenata</i>)	1.25	3.50	
DIOSPYROS kaki			
lotus .....	.50	1.25	
virginiana .....	.50	1.25	
virginiana, northern .....	.60	1.50	
virginiana, from trees in cultivation .....	.70	2.00	
DISANTHUS cercidifolius	1.00	2.80	8.00
DRACAENA draco , clean	1.50	4.25	
ELEAGNUS angustifolia , clean .....	.50	1.25	
commutata (<i>argentea</i>), clean .....	.80	2.25	
umbellata, clean	1.35	3.75	
ELSHOLTZIA stauntoni 1.00 $\frac{1}{8}$ oz.			
ENKIANTHUS campanulatus , N. E. 1.25 $\frac{1}{4}$ oz.			
cernuus rubens	1.40 $\frac{1}{4}$ oz.	4.00	
ENTEROLOBIUM cyclocarpum 1,000 seeds 5.00			
ERICA carnea , clean	1.00 $\frac{1}{4}$ oz.	2.50	
ERIOBOTRYA japonica , please order in spring for summer delivery			3.00
ERYTHRINA corallicodendrum 250 seeds 2.50—1,000 seeds 6.50			
crista-galli 250 seeds 2.25 — 1,000 seeds 6.00			
EUCALYPTUS botryoides	2.50	7.00	
camaldulensis (<i>rostrata</i>)	1.75	5.00	
globulus, clean	2.35	6.50	
EUONYMUS alatus , clean	1.25	3.50	
europaeus, clean .....	.70	2.00	
fortunei (<i>radicans</i>) clean	1.30	3.75	
japonicus, clean	1.10	3.00	
*sachalinensis (<i>planipes</i>), N. E., clean	1.00	2.50	
yedoensis, d.b., N.E.		2.00	
EXOCHORDA grandiflora	1.40	4.00	
FEIJOA sellowiana 1,000 seeds 2.75			
FIRMIANA simplex .....	.80	2.25	

		oz.	¼ lb.	lb.
FRANKLINIA	<i>alatamaha</i>	100 seeds	1.75, 1,000 seeds	11.00
FRAXINUS	<i>americana</i> , true type			1.65
	<i>excelsior</i>			1.00
	<i>mandshurica</i>			1.10 3.00
	<i>nigra</i>			.50 2.25
	<i>ornus</i>			1.00
	<i>pennsylvanica</i> (pubescens), N. E.			.60 1.50
	<i>pennsylvanica lanceolata</i>			1.00
FREMONTIA	<i>californica</i>		1.00 ¼ oz.	
GARDENIA	<i>jasminoides</i> (florida)			2.20 6.00
GAULTHERIA	<i>procumbens</i>		1.50 ½ oz.	
GENISTA	<i>aethnensis</i>			.50 1.25
	<i>canariensis</i>			1.00 2.50
	<i>fragrans</i>			1.10 3.00
	<i>germanica</i>			1.00
	<i>monosperma</i>			1.55
	<i>pilosa</i>			1.00
	<i>radiata</i>			1.00
	<i>tinctoria</i>			1.65 4.50
GINKGO	<i>biloba</i>			.70 2.00
GLEBITSIA	<i>japonica</i>			.90 2.50
	<i>sinensis</i>			1.00 2.75
	<i>triacanthos</i>			.50 1.10
	<i>triacanthos inermis</i>			.60 1.50
GREVILLEA	<i>robusta</i>		1.00 ¼ oz.	2.75 7.50 21.00
GYMNOCLADUS	<i>dioicus</i>			1.00
HALESIA	<i>carolina</i> (tetraptera)			.90 2.50
	<i>diptera</i>			1.10 3.00
	<i>monticola</i>			.90 2.50
HAMAMELIS	<i>japonica</i>			1.80 5.25
	<i>mollis</i> , N. E.			2.00
	<i>vernalis</i>			1.50 4.25
	<i>vernalis tomentella</i>			2.00
	<i>virginiana</i>			1.00 2.75 7.50
HIBISCUS	<i>syriacus</i>			.60 1.50
	<i>syriacus</i> , white flowered			.65 1.75
HIPPOPHAE	<i>rhamnoides</i>			.80 2.25
HOVENIA	<i>dulcis</i>			1.20 3.25
HYDRANGEA	<i>petiolaris</i> , true to name, N. E.	1.00	¾ oz.	
	<i>petiolaris</i> , imported	.50	¼ oz.	1.25
HYPERICUM	<i>frondosum</i> (aureum)	1.00	⅛ oz.	
	<i>kalmianum</i>	1.00	¼ oz.	
IDESIA	<i>polycarpa</i>			2.20 6.00
ILEX	<i>aquifolium</i> , clean			.65 1.75
	<i>aquifolium</i> , from garden varieties			.85 2.50
	<i>aquifolium</i> , from domestic orchards, clean			1.40 4.00
* cornuta	, domestic, cleaned and floated			2.25 6.00
	<i>crenata</i> , clean			1.10 3.00
	<i>crenata convexa</i> (bullata) N. E., d.b.,			1.00
	<i>glabra</i> , d.b.			.65 1.75
	<i>latifolia</i>			2.00 5.75
	<i>opaca</i> , clean			1.75 5.00
	<i>opaca</i> , clean, northern sources, Zone 6			2.20 6.00

	oz.	$\frac{1}{4}$ lb.	lb.
<i>pedunculosa</i> , clean		1.80	5.25
<i>serrata</i> (sieboldi), clean		1.70	4.75
<i>verticillata</i> , clean, N. E.		2.80	8.00
INDIGOFERA dosua	1.25		
JUBAEA spectabilis 500 seeds	4.00		
JUGLANS cinerea , N. E. per bushel (28 lbs.)	7.50		
<i>nigra</i> per bushel (40 lbs.)	11.00		
<i>sieboldiana</i> .....	.50	1.25	
<i>sieboldiana cordiformis</i> .....	.50	1.25	
JUNIPERUS californica , clean	2.70	7.50	
<i>chinensis</i> , clean	1.50	4.25	
<i>chinensis sargentii</i> , clean	2.20	6.00	
<i>communis depressa</i> , clean	2.75	7.50	
<i>communis</i> , upright columnar type, clean .....	.60	2.00	
<i>conferta</i> , (litoralis), clean	2.50	7.00	
* <i>pachyphloea</i> , clean	2.35	6.50	
<i>procumbens</i> , clean	2.35	6.50	
<i>rigida</i> , clean	1.65	4.50	
<i>scopulorum</i> , clean, northern	1.65	4.00	
<i>scopulorum</i> , dainty leaved Southern blue form, cleaned and floated	2.20	6.00	
<i>virginiana</i> , Northern form, from plants in cultivation	1.50	4.25	
<i>virginiana</i> , Platte River type, clean	1.70	4.75	
<i>virginiana glauca</i> , clean	1.75	5.00	
KALMIA latifolia , New England, from garden specimens	1.00 $\frac{1}{4}$ oz.	2.50	
<i>latifolia</i> , from Red flowered selections	1.25 pkt., 2.00 $\frac{1}{2}$ oz.		
<i>latifolia fuscata</i> , brown-eyed Mountain Laurel, a form distinguished by its flower variation and compact habit	1.25 pkt., 2.00 $\frac{1}{2}$ oz.		
KALOPanax pictus (<i>Acanthopanax ricinifolius</i>)	2.00	6.00	
KERRIA japonica	1.50	4.25	
KOELREUTERIA paniculata .....	.65	1.75	
KOLKWITZIA amabilis , clean, N. E.	1.75	5.00	
LABURNUM alpinum	1.00	2.85	
<i>anagyroides</i> (<i>vulgare</i>) .....	.90	2.50	
LAGERSTROEMIA indica , clean	1.65	4.50	
LARIX decidua (<i>europaea</i>) Eastern Alps, elev. 3,000-4,200 ft. <i>decidua</i> , foothills of Eastern Alps, 1,800-2,700 ft., strain considered equal to <i>sudetica</i> form. CERT.	2.75	7.50	
<i>decidua</i> , large seeded strain from Western High Alps, 6,000 ft., of late starting and early terminating growth, cold and wind resistant, straight, tall, rapid grower, a good timber tree, a fine ornamental. CERT.	4.65	12.50	
<i>leptolepis</i>	2.35	7.75	
<i>occidentalis</i>	1.75	5.00	
LAURUS nobilis , clean	5.00	14.00	
LESPEDEZA bicolor , clean, domestic seed		1.25	
<i>buergeri</i> .....		.90	2.50
<i>japonica</i>		1.25	3.50
<i>thunbergi</i> (<i>formosa</i>)		1.20	3.25
LEUCOTHOE catesbaei	1.00 $\frac{1}{4}$ oz., 2.50 oz.	1.20	3.25
LIBOCEDRUS decurrens .....		.80	2.25
LIGUSTRUM amurense "North Privet", d.b. ....		.70	2.00
<i>ibota</i> , clean .....		.80	2.25
<i>japonicum</i> , d.b. ....		.65	1.75

	oz.	1/4 lb.	lb.
LIGUSTRUM (continued)			
<i>lucidum</i> , d.b.	1.00	2.75	
<i>obtusifolium</i> (ibota of trade), d.b. ....	.70	2.00	
<i>ovalifolium</i> , d.b. ....	.50	1.25	
<i>sinense</i> ("South" Privet), d.b. ....	.50	1.10	
<i>vulgare</i> , clean ....	.70	2.00	
LIQUIDAMBAR <i>styraciflua</i>	1.00	2.35	6.50
LIRIODENDRON <i>tulipifera</i> ....	.50	1.25	
LIVISTONA <i>chinensis</i> (<i>Latania borb.</i>)	1,000 seeds	5.25	
LONICERA <i>caprifolium</i> , clean		1.75	5.00
<i>etrusca</i> , clean		1.70	4.75
<i>henryi</i> , d.b., N. E.	1.75		
<i>japonica</i> , clean		2.20	6.00
<i>korolkowi zabeli</i> , fine red flowered form, d.b.	1.50		
<i>maackii podocarpa</i> , d.b., N. E.	1.00	3.00	
<i>morrowi</i> , d.b., N. E.		2.20	6.00
<i>morrowi</i> , yellow fruited, d.b.		2.00	5.50
<i>ruprechtiana</i> , d.b., N. E.		2.00	6.00
<i>tatarica</i> , clean		1.10	3.00
<i>tatarica rosea</i> , d.b.		1.40	4.00
<i>tatarica wheeleri</i> (red), d.b., N. E.	1.00	2.00	
<i>xylosteum</i> , clean		1.80	5.25
MAACKIA <i>amurensis</i>		1.30	3.75
MACLURA <i>pomifera</i> ....		.65	1.75
MAGNOLIA <i>denudata</i> (<i>conspicua</i>), d.b.		1.40	4.00
<i>grandiflora</i> , clean		1.10	3.00
<i>kobus</i> , clean		1.50	4.25
<i>liliflora</i> , d.b.		1.35	3.75
<i>obovata</i> (<i>hypoleuca</i>), clean		1.25	3.50
<i>soulangeana</i> , d.b.		1.40	4.00
<i>virginiana</i> (<i>glaucia</i>), clean		1.85	5.50
MAHONIA <i>aquifolium</i>		2.40	6.50
MALUS <i>baccata</i> , clean	2.00	5.60	16.00
<i>baccata</i> , dried pomes		1.00	2.75
<i>baccata mandshurica</i> , dried pomes		1.10	3.00
<i>coronaria</i> , clean	1.30	3.60	10.00
<i>common</i> , Apple for stock, French crop failing, seed from East Central Europe is offered		1.00	2.75
<i>common</i> , Apple for stock — domestic seed ....		.90	2.50
<i>floribunda</i> , clean	2.00	5.00	14.00
<i>ioensis</i> , clean	1.35	3.75	
* <i>sargentii</i> , dried pomes, N. E., Free blooming, dwarf orna- mental Crab, true from seed		1.75	5.00
<i>sieboldii</i> , clean	1.25	3.10	8.50
<i>sieboldii arborescens</i> , clean, N. E. tree of moderate size, faster growing than <i>sieboldii</i> , handsome in flower and with prominent display of fruit	2.25	6.50	18.00
<i>theifera</i> (<i>hupehensis</i>), clean, handsome small tree, very free blooming, true from seed	2.25	6.45	18.00
<i>zumi</i> , clean	1.25	3.10	8.50
<i>zumi calocarpa</i> , dried pomes ....		.90	2.50
MELALEUCA <i>leucadendron</i>	1.25	3.25	
MELIA <i>azedarach</i> ....		.70	2.00
MENISPERMUM <i>canadense</i> ....		.70	2.00
MESPILUS <i>germanica</i> , clean ....		.70	2.00

	oz.	1/4 lb.	lb.
MORUS alba , clean .....	.90	2.50	
<i>tatarica</i> , clean	2.20	6.00	
new midwestern species, tentatively named <i>americana</i>	1.00	2.50	
<i>nigra</i> , clean	1.10	3.00	
<i>rubra</i>	1.00		
MYRICA caroliniensis (<i>pennsylvanica</i>) N. E. ....	.90	2.50	
MYRTUS communis , clean	2.20	6.00	
NANDINA domestica , clean	1.25	3.50	
<i>domestica</i> , white berries, imported, clean	1.50	4.25	
NYSSA aquatica , clean	1.75	5.00	
<i>sylvatica</i> , clean	1.35	3.75	
OLEA europaea , seed from Orchard varieties .....	.60	1.50	
<i>europaea</i> , seed from wild plants .....	.80	2.25	
ORIXA japonica	2.20	6.00	
OSMANTHUS ilicifolius (<i>aquifolium</i>), domestic seed	2.20	6.00	
OSTRYA carpinifolia , clean	1.35	3.75	
<i>virginiana</i> , clean	2.20	6.00	
OXYDENDRUM arboreum , clean .....	.75 1/4 oz.	1.25	
PAEONIA suffruticosa (<i>arborea</i> or <i>moutan</i>), from choice domestic collection	1.40	4.00	11.0
PALIURUS spina-christi (<i>aculeatus</i>), clean .....	.60	1.50	
PARKINSONIA aculeata	1.25	3.25	
PARTHENOCISSUS (<i>Ampelopsis</i>) <i>quinquefolia</i> , clean .....	.65	1.75	
<i>tricuspidata</i> (<i>veitchii</i>), clean .....	.80	2.25	
PASSIFLORA coerulea	1.30	3.60	10.00
<i>incarnata</i>	1.30	3.60	10.00
PAULOWNIA tomentosa .....	.65	1.75	
PHASEOLEUS caracalla 100 seeds 1.00, 1,000 seeds 6.00			
PHELLODENDRON amurense , clean .....	.55	1.35	3.75
PHILADELPHUS coronarius , clean	1.35	3.75	
<i>grandiflorus</i> , clean	1.25	3.50	
<i>pubescens</i> , vigorous native species	1.25		
PHOENIX canariensis .....	.50	1.20	
<i>dactylifera</i> .....	.80	2.25	
PHOTINIA glabra , clean	1.75	5.00	
<i>villosa</i> , clean	1.65	4.50	
PHYSOCARPUS opulifolius (<i>Spiraea opul.</i>), Ninebark	2.20	6.00	
PICEA ABIES (<i>excelsa</i>), Norway Spruce seed will be lim- ited in quantity and choice of strains because of failing 1957 crops in most all areas of production.			
<i>abies</i> , Central Europe, hill origins, 1,800 ft.	3.40	9.50	
<i>abies</i> , Central Europe, mountain origins, 3,000 - 3,900 ft.	3.40	9.50	
<i>abies</i> , Finland, a lowland strain. Well suited because of its moderate rate of growth, for landscaping and container grown Christmas trees, also for planting under adverse northern conditions, CERT.	2.75	7.50	
<i>abies</i> , Lowland strain, South Sweden, near sea-level, the hardiest and most wind-burn resistant strain of the Central European race of Norway Spruce (not the slow growing arctic type), the best strain for the Northern states and Canada. CERT.	1.25	3.40	9.50
<i>abies</i> , domestic Lake States, New England	1.25	3.50	10.00

	oz.	$\frac{1}{4}$ lb.	lb.
PICEA (continued)			
engelmanni, Colorado or Montana seed		2.35	6.50
glauca, Lake States or New York State seed.....	2.00	5.50	15.00
glauca (canadensis) from planted stands near sea-level, Northern Europe, CERT. for seed quality and ex- cellence of stock this strain has found many friends, since we introduced it nearly thirty years ago.		1.25	3.50
. . . . .		.80	2.25
glauca	1.40	4.00	11.00
glauca albertiana	2.00	5.50	15.00
glauca densata (Black Hills)		1.25	3.35
.		1.40	4.00
pungens		1.75	5.00
pungens glauca		1.40	4.00
sitchensis		1.75	5.00
PIERIS floribunda , N. E.	1.50	$\frac{1}{4}$ oz.	4.50
japonica, N. E., late fall	1.00	$\frac{1}{4}$ oz.	2.50
japonica, imported, spring delivery		1.50	
PINUS aristata		2.75	7.75
banksiana	1.00	2.70	7.50
canariensis		1.75	5.00
cembra .....		.60	1.50
cembroides edulis		1.30	3.75
contorta	1.75	4.50	12.00
contorta latifolia (murrayana)	1.30	3.60	10.00
densiflora		1.10	3.00
echinata	2.00	5.20	14.00
flexilis		1.40	4.00
griffithi (excelsa) .....		.90	2.50
halepensis .....		.60	1.50
halepensis brutia .....		.90	2.50
jeffreyi		1.85	5.50
khasya	1.25	3.60	
koraiensis		1.20	3.25
lambertiana		1.35	3.75
merkusi	1.25	3.60	
monticola	1.00	2.70	7.50
mugo (montana), Lowland seed		1.25	3.50
mugo mughus, Tyrolean Alps, dwarf type. CERT.	1.00	2.35	6.50
mugo pumilio, dwarfest of mugo group from Eastern Alps (limestone). CERT., see page	1.25	3.35	9.00
mugo rostrata (uncinata) European Alps		2.80	8.00
nigra, Hill strain, elev. 900 - 1,500 ft. from the heart of Austrian Pine country in Austria. CERT.		1.35	3.75
Same elev. 1,500 - 2,400 ft. CERT.		1.35	3.75
nigra, Central European sources .....		.90	2.50
nigra, from planted stands on sand near sea-level North-Europe		1.40	4.00
palustris		1.30	3.35
parviflora (pentaphylla)		1.50	4.25
patula		1.35	3.75
pinaster (maritima) .....		.60	1.25
pinea .....		.60	1.50
ponderosa, British Columbia		1.25	3.50
ponderosa, Colorado		1.65	4.50
ponderosa scopulorum		1.25	3.50
pumila		2.20	6.00

	oz.	$\frac{1}{4}$ lb.	lb.
PINUS (continued)			
<i>radiata</i> (<i>insignis</i>)		1.29	3.25
<i>resinosa</i> , Lake States. CERT.	2.50	6.70	18.00
<i>resinosa</i> , New York State. CERT.	2.50	7.20	20.00
<i>rigida</i> , New York State		2.60	7.25
<i>sabiniana</i> .....		.80	2.25
<i>strobus</i> , Lake States. CERT.	1.00	2.80	8.00
<i>sylvestris</i> , Scotch Pine, for diversity of requirements a choice of strains is offered: See page 25 Pine Lore.			
A. Strains from the plains of Northern Europe.			
Seed from Belgium, Campine Strain. CERT.		1.80	5.25
Seed from North German Low Plain. CERT.		3.60	10.00
Seed of West Baltic origin, Sweden. CERT.	2.00	5.60	16.00
B. Mountain Strains.			
Seed from Highland forests in France. CERT.		1.85	5.50
Seed from Austrian Forests, hill strain. CERT.		2.35	6.50
Seed from Rigensis type trees, Northern New York State, Hill Country, elevation, 1,200 ft., CERT.	2.00	5.50	15.00
Seed from North Central Spain, elevation 3,750 ft.	1.25	3.50	10.00
C. Insular isolation has set apart as distinctive for practical purposes the Scotch Pine races indigenous to England. Favorable reports regard them as suitable both for timber and Christmas tree production.			
Seed from government forests in East Anglia, near sea level. CERT.		3.60	10.00
Seed of the true Scots Pine of Scotland, elevation 100 - 650 ft. CERT.	1.65	4.60	12.75
<i>taeda</i>		3.35	9.00
<i>thunbergi</i>		1.25	3.50
PITTOSPORUM <i>tobira</i> , clean		1.10	3.00
PLATANUS <i>occidentalis</i> .....		.50	1.25
<i>orientalis</i> , clean .....		.50	1.25
PLUMBAGO <i>capensis</i>	1,000 seeds	4.00	
PODOCARPUS <i>macrophylla</i>		1.35	3.75
<i>nagi</i>		1.15	3.25
POINCIANA <i>gilliesii</i>		1.15	3.25
(Delonix) <i>regia</i>		2.20	6.00
PONCIRUS (Citrus) <i>trifoliata</i> .....		.50	1.25
PRUNUS <i>americana</i> , Lake States, clean .....		.70	2.00
<i>americana</i> , Prairie States, clean .....		.50	1.25
<i>amygdalus</i> (<i>communis</i>)			1.00
<i>armeniaca</i> , clean (Apricot)			1.00
<i>armeniaca</i> , <i>ansu</i> .....			.90
<i>avium</i> , clean .....		.50	1.25
<i>avium sylvestris</i> , true silver bark Mazzard from wild trees .....		.70	1.85
<i>besseyi</i> , clean		1.25	3.50
<i>campanulata</i>		1.25	3.50
<i>caroliniana</i> .....		.60	1.50
<i>cerasifera</i> (Myrobalan), clean .....		.50	1.25
<i>cerasifera</i> , seed from Bulgaria, a northern strain preferred by many growers .....		.60	1.50
<i>incisa</i> , clean, imported		1.50	4.25
<i>incisa</i> , dwarf Mountain strain, small compact tree, d.b. N. E.	1.00	3.00	
<i>japonica</i>		1.20	3.25

	oz.	$\frac{1}{4}$ lb.	lb.
PRUNUS (continued)			
<i>laurocerasus</i> (<i>officinalis</i>), clean .....		.70	2.00
<i>mahaleb</i>		1.00	2.75
<i>maritima</i> , clean N. E.		1.35	3.75
<i>mume</i> , clean .....		.50	1.25
<i>padus</i> , clean, imported		1.35	3.75
<i>salicina</i> (<i>triflora</i>) .....		.45	.95
* <i>sargentii</i> (<i>serrulata sachalinensis</i>) clean		1.25	3.50
<i>serotina</i> , clean .....		.60	1.50
<i>serotina</i> , d.b. N. E. .....		.50	1.10
<i>serrulata</i> , clean .....		.90	2.50
<i>subhirtella</i> , clean		1.00	2.75
<i>subhirtella pendula</i> , clean		1.20	3.25
<i>tomentosa</i> , domestic, clean	1.00		
<i>tomentosa</i> , imported .....		.90	2.50
<i>virginiana</i> , clean .....		.70	2.00
<i>virginiana melanocarpa</i> , d.b.		1.25	
<i>yedoensis</i> .....		.90	2.50
PSEUDOLARIX <i>amabilis</i> (<i>kaempferi</i>)		1.20	3.25
PSEUDOTSUGA <i>taxifolia caesia</i> , Interior strain, British Columbia	2.00	4.00	11.00
<i>taxifolia caesia</i> , Interior strain, Montana	2.00	4.65	12.50
<i>taxifolia glauca</i> , Colorado strain	2.00	4.65	12.50
<i>taxifolia viridis</i> , Coast form, Washington, elevations 2,000 - 4,500 ft. CERT.		5.60	16.00
PTELEA <i>trifoliata</i> .....		.50	1.25
PUERARIA <i>thunbergiana</i> .....		.70	2.00
PYRACANTHA <i>coccinea</i> , clean .....		.90	2.50
<i>coccinea lalandi</i> , clean		1.10	3.00
<i>coccinea lalandi</i> , d.b. N. E. hardy strain, plants wintering at Boston		1.75	5.00
PYRUS common pear, domestic seed		1.25	3.50
common pear, French imported		2.50	7.00
<i>pyrifolia</i> (<i>serotina</i>)		2.50	7.00
QUERCUS <i>palustris</i> — not less than 5 lbs. sold .....		.70	
RHAMNUS <i>californica</i> , d.b.		1.10	3.00
<i>cathartica</i> , clean .....		.90	2.50
<i>davurica</i> , clean		1.40	4.00
<i>purshiana</i> , clean		1.25	3.50
RHODODENDRON — Items marked (*) are supplied to us in selfed (hand-pollinated) seeds of northern origin by noted expert. Packets as offered contain several hundred seeds. Will quote for larger quantities.			
* <i>adenogynum</i>	1.00	pkt.	
<i>arboreum</i> , blood red	1.00	pkt.	
<i>arboreum</i> , mixed shades .....	.75	$\frac{1}{4}$ oz.	
<i>augustini</i>	1.00	pkt.	
<i>auriculatum</i>	1.00	pkt.	
<i>barbatum</i>	1.00	pkt.	
<i>calophyllum</i>	1.00	pkt.	
* <i>caloxanthum</i>	1.00	pkt.	
* <i>campanulatum</i>	1.00	pkt.	
<i>cantabile</i>	1.00	pkt.	
<i>carolinianum</i> , N. E. .....	.75	pkt., 2.00 $\frac{1}{8}$ oz.	
<i>carolinianum</i> , blush .....		.75	pkt.
<i>carolinianum</i> , white .....		.75	pkt.

RHODODENDRON (continued)oz. $\frac{1}{4}$ lb. lb.

catawbiense	1.00 $\frac{1}{16}$ oz., 3.00 $\frac{1}{4}$ oz.	
catawbiense compactum, N. E.	1.25 $\frac{1}{16}$ oz.	
caucasicum	.75 pkt.	
cerasinum	1.00 pkt.	
*chartophyllum	1.00 pkt.	
cinnabarinum	1.00 pkt.	
*concinnum	1.00 pkt.	
crinigerum	1.00 pkt.	
croceum	1.00 pkt.	
*decorum	1.00 pkt.	
diaprepes	1.00 pkt.	
discolor	1.00 pkt.	
eximium	1.00 pkt.	
falconeri	1.00 pkt.	
*fargesi	1.00 pkt.	
ferrugineum	.50 pkt., 1.00 $\frac{1}{8}$ oz.	
*fictolacteum	1.00 pkt.	
fortunei, a hardy strain, N. E.	1.00 $\frac{1}{32}$ oz., 3.00 $\frac{1}{8}$ oz.	
*fulvum	1.00 pkt.	
griersonianum	1.00 pkt.	
*haematodes	1.00 pkt.	
hippophaeoides	1.00 pkt.	
hirsutum	.50 pkt., 1.00 $\frac{1}{8}$ oz.	
hodgsoni	1.00 pkt.	
insigne	1.00 pkt.	
keysi	1.00 pkt.	
leucaspis	1.00 pkt.	
macabeatum	1.00 pkt.	
maximum, N. E.	1.00 $\frac{1}{4}$ oz.	3.50
*neriiflorum	1.00 pkt.	
orbiculare	1.00 pkt.	
oreotrephe	1.00 pkt.	
ponticum, Northern Europe	1.25 $\frac{1}{4}$ oz.	
praevenum, N. E.	1.00 pkt.	
*pseudoyanthinum	1.00 pkt.	
racemosum	1.00 pkt.	
smirnowi	1.00 pkt.	
*souliei	1.00 pkt.	
sutchuenense	1.00 pkt.	
*thomsoni	1.00 pkt.	
*vernicosum	1.00 pkt.	
*wardi	1.00 pkt.	
williamsianum	1.00 pkt.	
*yunnanense	1.00 pkt.	

RHODODENDRN HYBRIDS: see listing on pages 21 — 23.

RHODOTYPOS scandens (kerrioides)		1.40	4.00
RHUS canadensis, (aromatica), clean		1.75	5.00
cotinus, see Cotinus coggygria			
trilobata, clean		1.25	3.50
ROBINA hispida fertilis		1.30	3.60 10.00
pseudoacacia, imported seed (the Eastern U. S. strain)		.50	1.25
pseudoacacia, domestic seed, Idaho strain		.70	2.00
pseudoacacia inermis		.90	2.50

	oz.	¼ lb.	lb.
ROSA <i>arkansana</i> , clean		2.20	6.00
<i>blanda</i> , clean		1.65	4.50
<i>canina</i> , clean .....		.50	1.10
<i>carolina</i> (<i>humilis</i>) d.h.		1.25	3.50
<i>eglantaria</i> (<i>rubiginosa</i>), clean .....		.80	2.25
<i>hugonis</i> , d.h.	1.25		
<i>micrantha</i> , d.h.	1.00		
<i>multiflora</i> , thornless, clean		1.10	3.00
<i>multiflora</i> , thorny, domestic seed		1.60	4.50
<i>multiflora</i> , thorny, clean, imported .....		.90	2.50
<i>primula</i> , d.h.	1.00	2.75	
<i>rubrifolia</i> , N. E., d.h.	1.50		
<i>rugosa</i> , clean		1.00	2.75
<i>rugosa</i> , deep red selection, N. E., clean		2.00	
<i>rugosa</i> , white, N. E. clean		2.00	
<i>setigera</i> , d.h. ....		.70	2.00
<i>setigera</i> , clean		2.20	6.00
<i>spinosissima</i> , d.h.		1.25	3.50
<i>virginiana</i> (<i>lucida</i>), clean		2.20	6.00
<i>wichuraiana</i> , clean		1.00	2.75
<i>xanthina spontanea</i> , d.h.	1.50		
RUSCUS <i>aculeatus</i> , clean .....		.90	2.50
SAMBUCUS <i>canadensis</i> , clean		1.20	3.25
<i>nigra</i> , clean .....		.60	1.50
<i>racemosa</i> , clean		1.20	3.25
SAPINDUS <i>drummondii</i> .....		.90	2.50
<i>mukorossi</i>		1.00	2.75
SASSAFRAS <i>albidum</i> (<i>varifolium</i>)		1.10	3.00
SCHINUS <i>molle</i> .....		.65	1.75
<i>terebinthifolius</i> .....		.90	2.50
SCHIZOLOBIUM <i>parahybum</i> (<i>excelsum</i>), tall (to 100 ft.), fast growing, tropical timber and ornamental tree, large fernlike foliage, masses of flowers in large golden sprays	1.75	4.50	12.00
SCHIZOPHRAGMA <i>hydrangeoides</i>	1.00	2.50	
SCIADOPITYS <i>verticillata</i>		2.40	6.75
SEQUOIA <i>gigantea</i> , from high elevations, 6,500 - 7,000 ft.	2.50	7.00	20.00
<i>sempervirens</i> , California seed only	1.75	4.50	12.00
SHEPHERDIA <i>argentea</i> , d.b.		1.10	3.00
SMILAX (see also Asparagus) <i>rotundifolia</i> , d.b. ....		.70	2.00
SOPHORA <i>japonica</i> .....		.60	1.40
<i>japonica</i> , seed from pendula form .....		.65	1.75
<i>secundiflora</i>		1.75	5.00
SORBUS <i>americana</i> , d.b.		1.10	3.00
<i>aria</i> , clean		2.20	6.00
<i>aucuparia</i> , imported, clean	1.00	2.50	7.00
<i>aucuparia</i> , domestic, d.b., N. E. ....		.90	2.50
<i>commixta</i> , d.b., N. E.		1.10	3.00
<i>decora</i> , d.b.	1.25		
<i>domestica</i> , clean	1.25	3.50	10.00
<i>torminalis</i> , clean .....	.85	2.35	6.50
SPARTIUM <i>juncinum</i> .....		.60	1.50

	oz.	1/4 lb.	lb.
STEWARTIA monadelpha , N. E.	1.20	1/4 oz.	3.00
koreana, N. E.	1.40	1/4 oz.	4.00
pseudocamellia, imported			1.50 4.00
serrata, N. E.	1.20	1/4 oz.	3.00
STYRAX japonica			1.00 2.75
obassia			1.35 3.75
SYMPHORICARPUS albus (racemosus)	1.00		2.75
orbiculatus (vulgaris), d.b.			.90 2.50
SYMPLOCOS paniculata , conspicuous in flower (white) and fruit (bright blue)			1.35 3.75
SYRINGA amurensis japonica , imported			5.00 14.00
henryi (villosa x josikaea)	1.75		4.50
josikaea			1.75 4.50
pekinensis, N. E.			1.50
villosa			1.75 4.50 12.00
villosa rosea			1.75 4.50
vulgaris			1.10 3.00
vulgaris alba			1.80 5.25
TAMARIX gallica			.70 2.00
TAXODIUM distichum			.60 1.50
distichum, clean			.90 2.50
TAXUS baccata			.90 2.50
baccata erecta, N. E.	1.20		3.25
baccata stricta (fastigiata)			1.35 3.75
cuspidata, seed from spreading forms, N. E.	1.30		3.60 10.00
cuspidata, seed from Japan (the so-called capitata form)			1.20 3.25
media hicksi, N. E.	1.30		3.60 10.00
THEA (Camellia) sinensis			.60 1.50
THUJA occidentalis			1.00 2.50 7.00
occidentalis, Northeastern or Lake States	1.15		3.10 8.50
occidentalis pyramidalis			3.50 10.00
occidentalis pyramidalis, from own specimens	2.00		5.00
orientalis			.60 1.50
orientalis, New England seed			1.25 3.50
orientalis, from select pyramids, N. E.			1.85 5.50
orientalis aurea			1.00 3.00
orientalis aurea nana			1.25 3.50
orientalis compacta (nana)			.90 2.50
orientalis elegantissima			1.00 2.75
orientalis globosa, N. E.	1.25		2.75
orientalis pyramidalis			.80 2.25
plicata	1.75		4.50 12.00
TILIA americana ,			.60 1.50
cordata			.65 1.65
japonica			1.25 3.50
platyphyllus			.50 1.25
tomentosa			.50 1.25
TORREYA californica			1.25 3.50
TRACHYCARPUS excelsus (fortunei)			.60 1.50
TSUGA canadensis , Northern crop. CERT	2.60		7.20 20.00
diversifolia			1.40 4.00 11.00
heterophylla			2.80 8.00 22.00
mertensiana			2.60 7.20 20.00
sieboldii			1.40 3.75 10.50

	oz.	$\frac{1}{4}$ lb.	lb.
ULEX europeaus		1.10	3.00
ULMUS americana			1.50
<i>glabra</i> (<i>montana</i>), Scotch Elm .....		.90	2.50
<i>procera</i> (<i>campestris</i>), English Elm .....		.90	2.50
<i>pumila</i> .....		.90	2.50
<i>pumila</i> , wings removed		1.50	4.25
VACCINIUM corymbosum , d.b.	1.10	3.00	
<i>corymbosum</i> , d.b., from large fruited cultivated named varieties			2.50
VIBURNUM acerifolium , d.b.			1.00 2.75
<i>burkwoodi</i>	2.00		
<i>carlesi</i> , d.b., N. E.	2.00	5.75	
<i>carlesi hybrids</i> , forms intermediate between <i>carlesi</i> and <i>bitchiuense</i> , d.b.	2.00	5.75	
<i>cassinoides</i> , d.b.		1.25	3.50
<i>dentatum</i> , d.b. ....		.70	2.00
<i>dentatum</i> , clean		1.40	4.00
<i>dilatatum</i> , clean		1.25	3.50
<i>lantana</i> , clean .....		.80	2.25
<i>lantana rugosum</i> , d.b., attractive foliage, large showy clusters of fruit		1.50	4.25
<i>lantanaphyllum</i> (<i>lantana</i> x <i>rhytidophyllum</i>)	1.50		
<i>lentago</i> , clean		1.35	3.75
<i>odoratissimum</i> , clean		1.25	3.50
<i>opulus</i> , clean		1.25	3.25
<i>prunifolium</i> , clean		1.50	4.25
<i>rhytidophyllum</i> , d.b.		1.35	3.75
<i>sargentii</i> , clean		1.25	3.50
<i>setigerum</i> (<i>theiferum</i>) <i>aurantiacum</i> , d.b., N. E., with conspicuous orange-red fruit	1.50		
<i>sieboldii</i> , clean		1.65	4.50
<i>tinus</i> , clean .....		.90	2.50
<i>tomentosum</i> , clean		1.25	3.50
<i>trilobum</i> (<i>americanum</i>)		2.20	6.00
<i>wrightii</i> , clean imported		1.65	4.50
<i>wrightii</i> , from grafted specimens, N. E., clean	1.00	2.75	
<i>wrightii</i> .....		.70	2.00
VITEX agnus-castus		1.10	3.00
VITIS coignetiae			
<i>riparia</i> (<i>odorata</i>) the true, hardy, Riverbank Grape, with fragrant flowers and sweet, very early ripening fruit .....		.90	2.50
WASHINGTONIA filifera			
<i>robusta</i>		1.00	2.75
WEIGELA , garden varieties	1.00		
WISTERIA floribunda (<i>multijuga</i>) blue		1.10	3.00
<i>floribunda rosea</i> , domestic, N. E.	100 seeds	2.00	
<i>frutescens</i>		1.25	3.50
<i>sinensis</i> , blue .....		.80	2.25
<i>sinensis</i> , white		1.20	3.25
YUCCA elata .....		.85	1.65 4.50
<i>filamentosa</i>		1.10	3.00 8.50
<i>glauca</i>		1.75	4.50 12.00
<i>macrocarpa</i>		1.00	2.75
<i>rupicola</i> .....		.75	2.20 6.00
<i>torreyi</i> .....		.75	2.20
ZELKOVA serrata		1.10	3.00

SEED SPECIALTIES

		oz.	1/4 lb.	lb.
ASPARAGUS asparagoides , Smilax of Florists .....	.50 1/4 oz.	1.25		
plumosus nanus		1.25	3.75	
plumosus robustus		1.75	5.25	
sprengeri		1.00	2.80	8.00
Waltham Washington , 20 years of breeding and selection by Mass., Waltham Field Station produced a strain of superior stooling capacity and short top growth, resulting in 25% increased production over old strains.				2.20 6.00
ATROPA belladonna			1.50	
CHRYSANTHEMUM , true fall flowering Chrys.				
Early flowering, single, mixed .....	.75 1/4 oz.			
Early flowering, double, mixed .....	.75 1/4 oz.			
Korean Hybrids .....	.50 pkt., 1.25 1/8 oz.			
CONVALLARIA majalis .....	.35 1/4 oz.	1.00		
DELPHINIUM Gold Medal Hybrids , High quality improved strain, American grown from Pacific Giants seed primarily .....	.50 1/16 oz., 1.25 1/4 oz.			
HELLEBORUS niger .....	.50 1/4 oz.	1.30	3.60	10.00
HIBISCUS moscheutos (palustris) N. E. true, native Rose- Mallow, pink and rose .....		.50	1.50	4.50
LAVANDULA vera (true Lavender) .....	.55 1/4 oz.	1.50	4.50	
LUPINUS polyphyllus in separate shades of blue, Carmine Red, Rose, Salmon, White, Yellow or mixed .....			.90	2.50
Russell Hybrids, from self sown, naturalized N. E. plants.		1.00	3.00	
MIMOSA pudica		1.00	3.00	
PAEONIA officinalis .....			.45	1.25
peregrina .....			.45	1.00
PRIMULA auricula .....	.65 1/8 oz.			
japonica .....	.60 1/16 oz.			
veris, Blue Shades .....	.85 1/8 oz.			
Giant Munstead, light shades .....	.65 1/8 oz.			
Large flowered, Border Mixture .....	.65 1/8 oz.			
Gold Laced .....	.50 1/8 oz.			
Golden Yellow .....	.50 1/8 oz.			
Lutea, bright Yellow .....	.50 1/8 oz.			
Ruby Red .....	.50 1/8 oz.			
White .....	.50 1/8 oz.			
Teicher's Colossal strain, giant flowered, wide range of colors .....	.75 1/8 oz.			
THYMUS serpyllum .....	.50 1/8 oz.	2.25		
ZOYSIA japonica , promising new Turf Grass from Japan			1.10	3.00

AZALEA HYBRIDS

If exclusively taken from this section please have your order amount to at least \$3.00. Packets as offered contain several hundred seeds.

AZALEA — Deciduous:

Altaclarensis (mollis x viscosa) orange yellow, blotched
 .75 pkt., 2.00 $\frac{1}{16}$ oz.

Embley Hybrids — a parallel development of the Exbury Hybrids — all colors, shades of yellow, pink, red
 1.50 pkt., 2.50 $\frac{1}{32}$ oz.

Embley Apricot, apricot pink 1.50 pkt., 2.50 $\frac{1}{32}$ oz.

Ghent Hybrids, all colors 1.25 $\frac{1}{16}$ oz., 3.75 $\frac{1}{4}$ oz.

Exbury Hybrids, choice race, a separate development of Knaphill Hybrids, all colors 1.50 pkt., 2.50 $\frac{1}{32}$ oz.

Knaphill Hybrids, the result of prolonged breeding, inter-crossing mollis, pontica (ghent), calendulacea and occidentalis strains 1.50 pkt., 2.50 $\frac{1}{32}$ oz., 7.50 $\frac{1}{8}$ oz.

Mollis Hybrids (mollis x japonica), from choice collection
 1.25 $\frac{1}{16}$ oz., 3.00 $\frac{1}{4}$ oz.

Named varieties — All —

 1.00 pkt., 1.25 $\frac{1}{32}$ oz., 3.50 $\frac{1}{8}$ oz.

Koster's Brilliant Red, glossy orange red

Lemonora, apricot, center rose

Louisa Hunnewell, yellow-salmon

Mrs. Oliver Slocock, rich orange-yellow, suffused terra-cotta

Robespierre, orange-red

AZALEA — Evergreen (New England grown):

Hinodegiri 1.00 $\frac{1}{32}$ oz.

Hinodegiri x mucronata (ledifolia), vigorous, free blooming Hybrids75 pkt., 1.50 $\frac{1}{32}$ oz.

indica (macrantha), garden varieties, N. E. 1.00 pkt.

"indica" (Indica Hybrids of Florists) .75 $\frac{1}{16}$ oz., 1.65 $\frac{1}{4}$ oz.

Obtusa arnoldiana (obt. amoena x obt. kaempferi)

Cardinalis, deep red 1.00 pkt., 2.00 $\frac{1}{32}$ oz.

Pink and Rose shades75 pkt., 1.50 $\frac{1}{32}$ oz.

Obtusa kaempferi x mucronata (ledifolia), Hazel Dawson large flowered reddish-violet 1.00 pkt.

Obtusa kaempferi hybrids, of kaempferi x malvatica and kaempferi x hinodegiri parentage, hardy and free blooming race in shades of pink and rose, light purple, red and mixed each
 1.00 pkt., 1.25 $\frac{1}{32}$ oz., 3.50 $\frac{1}{8}$ oz.

Also White 1.00

Obtusa kurume, from named varieties 1.00 pkt.

Sanderi Hybrids, strain offered is of apparent obtusa kaempferi x indica (macrantha) parentage, very free blooming, resembling and succeeding the "Malvatica" Hybrids.

Rose and Salmon shades 1.00 pkt., 1.50 $\frac{1}{32}$ oz.

Scarlet 1.25 pkt.

RHODODENDRON HYBRIDS

All packet lots offered contain several hundred seeds.

A. AMERICAN (NEW ENGLAND) GROWN:

Britannia x fortunei , from a group of selected plants, habit medium, fairly compact, colors, pink and rose shades	1.00 pkt., 2.75 $\frac{1}{8}$ oz.
Catawbiense Hybrids	
Seed from album elegans, selections, tall and fast growing, quite true from seeds in shades of white and blush	1.00 $\frac{1}{32}$ oz., 3.00 $\frac{1}{8}$ oz.
Seed from "America" red flowered clonal form	1.00 pk., 1.50 $\frac{1}{32}$ oz.
Pink and rose shades	1.00 $\frac{1}{16}$ oz., 3.00 $\frac{1}{4}$ oz.
Seed from red flowered plants	1.25 $\frac{1}{16}$ oz., 3.75 $\frac{1}{4}$ oz.
Mixed seeds	1.00 $\frac{1}{16}$ oz., 2.75 $\frac{1}{4}$ oz.
Catawbiense Red flowered Hybrids hand pollinated with with fortunei	1.00 pkt., 2.50 $\frac{1}{32}$ oz.
Catawbiense x Maximum (Wellesleyanum)	1.25 $\frac{1}{16}$ oz.
Discolor Hybrids	1.00 pkt.
Fortunei x Haematodes	1.00 pkt.
Fortunei x Hardy Hybrids , free blooming selections, low, compact habit	1.00 pkt.
Fortunei x Hardy Hybrids , tall, rose flowered selection of extreme hardiness, being pollen sterile. Seed pro- duced is the result of hand pollination with red flowered hybrids. Seedlings all will show the hy- br divigor of F1 generation	1.00 pkt., 2.50 $\frac{1}{32}$ oz.
Fortunei x Hardy Hybrids , all types	1.00 pkt., 2.00 $\frac{1}{32}$ oz.
Maximum x Arboreum , from choice free blooming se- lection	1.00 pkt., 2.00 $\frac{1}{32}$ oz.
Smirnowi x Hardy Hybrids	1.00 pkt.
Virgin (farg. hyb. x cataw. alba)	1.00 $\frac{1}{16}$ oz., 3.00 $\frac{1}{4}$ oz.

B. Selection of Popular Varieties as grown by English nurserymen. All are time tested and valued for their hardiness, good foliage, full flower trusses, ability to stand exposure:

Varieties each	1.00 pkt., 1.25 $\frac{1}{32}$ oz., 3.75 $\frac{1}{8}$ oz.
Alice , rose pink	
Ascot Brilliant , deep crimson	
Bagshot Ruby , blood-crimson	
Beauty of Littleworth (griffith hyb.), white	
Betty Wormald , rose-pink, purple blotch	
Britannia , bright crimson red	
Corona , coral pink	
Doncaster , scarlet crimson	
Earl of Athlone , bright blood-red	
Goldsworth Pink , pink	
Iveryanum , scarlet	
Jersey Cream , creamy yellow	
J. J. De Vink , glowing crimson	

RHODODENDRON HYBRIDS (continued)

Lady Clementine Mitford, peach pink, deeper margin
Lady Primrose, lemon yellow, red spots
Loder's White, pale mauve passing to pure white, large trusses
Madame De Bruin, cerise red
Meg Merillies, creamy white, shaded yellow and apricot
Mother of Pearl, blush turning snow-white
Mrs. A. R. Bide, deep pink, with brown-crimson ray
Pink Pearl, rose-pink
Queen Wilhelmina, large luminous cerise red
Rose Perfection, deep rose shaded glowing crimson
White Queen, pure white
Williamsianum Hybrids
Yellow Loderi, yellow
Blend of all varieties **2.00 $\frac{1}{16}$ oz., 6.00 $\frac{1}{4}$ oz.**

C. **RHODODENDRON HYBRIDS** as listed in Rhododendron **Stud Book** of the Royal Horticultural Society. Most all of recent origin, some classical hybrids of long standing. Seedling material of outstanding vigor and brightness may be expected from all of these.

Unless priced otherwise — **Packets 1.00 each, 1.50 $\frac{1}{2}$ oz.**

Albatross (Loderi x discolor), tall growing, large leaved, large trusses, white to shell pink.

Aurora (Kewense x thomsoni)

Azor (gries. x discolor), soft salmon pink trumpet

Bowbells (Corona x williamsonianum)

Cornish Cross (thoms. x griff.), superb foliage, large crimson trusses

Cupid (griff. x Luscombei)

Exminster (thomsoni x campylocarpum) form offered is the natural Hybrid

Fireball (barbatum x Ascot Brilliant), bright red

Fireglow (fort. hybr. x griers), scarlet

Firetail (Britan. x eriog), fine red shade

Gill's Triumph (arb. x griff.)

Goldsworth Yellow (caucas. x campyl.), apricot changing to yellow

RHODODENDRON HYBRIDS (continued)

Isabella (griff. x auric.), large fragrant white
Kewense (griffithianum x fortunei)
Lady Bessborough (disc. x campyl. elatum), vigorous shrub, creamy yellow-orange, pink-maroon blotch
Lodauric (Loderi x auricul.), large grower, huge trumps, white, fragrant late
Loderi (griff. x fort.)
 Variant King George, pink buds opening white
 Variant Venus, white, pink, flushed
 Variant White Diamond, clear blush
Luscombei (fort. x thoms.), large pink, excellent foliage
Mrs. Kingsmill (Penjerrick, A. M. var.) (campyl. el. x griff.) yellow
Naomi (aurora x fortunei)
Penjerrick (campyloc. x griff.), lavender
Pink Shell (griff. x H. M. Ardene), rose-pink
Polar Bear, (diaprepes x auric.), magnificent late flowering giant, large white trusses **2.00 pkt.**
Queen o' the May (Pink Bell x grier.) excellent white
Rosabel (Pink Shell x grier.) large pale pink, darker veins
Shilsoni (thoms. x barb.), deep crimson red
Snow Queen (griff. x maximum x Loderi), pure white
Souldis, (soulei x disc.), large trusses, white bell shaped flowers
Susan (campanul. x fortunei), white, creamy yellow or pink
Tally Ho (griers. x eriogynum,) bright vermillion
Blend of Stud Book varieties **2.50 $\frac{1}{16}$ oz., 7.50 $\frac{1}{4}$ oz.**

SEEDLING GROWERS' REFERENCE

Austrian Pine	see	<i>Pinus nigra</i>
Red Pine	see	<i>Pinus resinosa</i>
Scotch Pine	see	<i>Pinus sylvestris</i>
White Pine	see	<i>Pinus strobus</i>
Black Hills Spruce	see	<i>Picea glauca densata</i>
Blue Spruce	see	<i>Picea pungens glauca</i>
Norway Spruce	see	<i>Picea abies</i>
White Spruce	see	<i>Picea glauca</i>
Douglas Fir, Blue	see	<i>Pseudotsuga taxifolia glauca</i>
Douglas Fir, Gray	see	<i>Pseudotsuga taxifolia caesia</i>
Hemlock	see	<i>Tsuga</i>

PINE LORE

With many growers confused as to what strains of Scotch Pine to plant we feel competent in giving the following suggestions:

Practically all strains are, for some condition or other, suitable both for forest planting, i.e., timber production and for use as ornamentals or Christmas trees.

In general two major races of Scotch Pine concern us here:

Strains from Northern Europe growing on the sandy plains which stretch from the coast of Belgium and Holland all the way east to, and around, the shores of the Baltic Sea. They are considered good strains for reforestation, grow comparatively fast, but usually have the objectionable feature of foliage discoloration with the approach of cold weather. They all do best on deep, sandy soils. If planted on better soils plants have a tendency to "overeat," grow too fast and are prone to fall prey to disease and insect infestations. As an exception as to winter color the Pine strain of the North German low plain warrants attention.

The **Mountain Strains** from various origins in Europe usually growing on stony soils are better adapted for all around planting. It is from these strains that best results can be expected for use as Christmas trees. Grown on sandy soils plants from these strains may require feeding to show best foliage color.

SCOTCH PINE — Seed from Highlands Forest in France (formerly offered as green strain — Western Europe), elevation 2,700 - 3,600 feet has been the preferred choice of Christmas Tree growers for many years. It keeps its color well, is short needled, fairly fast growing and of bushy habit, much used for wind-breaks, shelter planting, landscaping. Its wood, reported to qualify with that from northern strains, warrants a trial for timber production on stony loam soils. 86,000 seeds per pound.**

SCOTCH PINE — Seed from the mountains of Spain. Grower's initial reports indicate, that the strain can be expected to do well in possibly all but the most northerly areas. Because of the excellent seed grade available and the good foliage color of this form Christmas tree growers will want to give it a trial.

SCOTCH PINE — Seed from Austrian Forests, a hill strain, elevation 1,400 feet, green needles, straight stems, small crowns, 78,500 seeds per pound. This strain, in some sections is preferred to the former. It ranks second in choice for Christmas tree production.

SCOTCH PINE — Belgian Campine Strain—we are again offering this strain because of its excellent qualities as a forest tree. It is fast growing with straight stems, attaining largest average height and bole increment in

**seed counts as given here are approximate, weather conditions causing variations from year to year.

comparison to other strains of Central Europe. While the foliage remains green in winter it is not favorably regarded by Christmas tree growers because of its long needles. Some, however, report that it responds well to shearing and like it for that reason. The tree does well on sand.

SCOTCH PINE — Seed from North German Low Plain. This strain has lately come to the attention of Christmas tree growers for its ability to do well on sand. Trees about twenty years old, on our own land, have shown only the slightest of foliage discoloration during the cold months in comparison to definite yellowing of Riga strain (Latvia) trees. Color, somewhat more intense than with the latter, is a bright-bluish green. Needles are from $2\frac{1}{2}$ -3 inches long, a trifle wider and heavier in texture than those of the $2\frac{1}{2}$ - $2\frac{3}{4}$ inches long of the Riga strain. Seasonable increase is moderate, little in excess of Riga strain trees. We will supply certified seed from selected stands, collected under supervision of state foresters.

SCOTCH PINE — The West Baltic Strain from the East Coast of Sweden is somewhat different from the East Baltic or Riga strains which it surpasses in rate of annual increase. This is possibly the best strain for timber and planting in the North. 90,000 seeds per pound. Seedlings are unusually resistant to adverse conditions.

PINUS MUGO (MONTANA) — which is much planted on mountain slopes and steep banks to stop erosion, rock and snow slides, is of equal value for stopping wind erosion on dune lands in coastal districts. Closely planted it will form, in time, impenetrable thickets, a barrier to wind-blown sand, a refuge for wild life.

PINUS MUGO PUMILIO — Shubby Swiss Pine as indicated by its form name Pumilio i.e. Dwarf, is the smallest of the Mountain Pines. Seed, certified as to origin, comes, we are assured, from pure stands at high altitude, 4,300-4,800 feet, without presence of trees of the Tree Swiss Pine (*rostrata*) to influence the dwarf habit by cross-pollination.

PSEUDOTSUGA TAXIFOLIA (douglasii) CAESIA — The gray Douglas Fir is considered to be a form intermediate between the green Pacific Coast and the blue Rocky Mountain varieties which it surpasses in rate of seasonal increase. As an ornamental it is preferred to the Rocky Mountain type in sections where trees of the latter are affected with premature dying of lower branches. It is much used as a Christmas tree either cut from the wild or nursery grown. Originating in interior sections with drought conditions in summer and severe cold weather in winter it is entirely hardy in the north, reported thriving in cultivation in Finland. We take pride in the fact of having been the first seed-house in the states to list and describe this tree a good many years ago.

DORMANCY IN SEEDS OF PINE, SPRUCE, OTHER CONIFERS — Failure to germinate promptly certain conifer seeds is often due to the fact that no

consideration had been given to dormancy factors. Seeds most usually concerned are: — White Spruce, White Pine, other Pines of the Cembra, *Flexilis* and *Strobus* groups.

In Fir (*Abies*), Hemlock (*Tsuga*), Douglas Fir (*Pseudotsuga*), Larch (*Larix*), Sitka Spruce dormancy occurrence is variable with dormancy found in some lots and none in others.

In Blue Spruce (*Picea pungens*) fifty percent of seed are dormant, the other half fast germinating.

Late spring planting of all of the before mentioned is apt to result in total failure or partial germination only. Fall planting of some, early spring planting for others or pre-treatment (stratification) of seed lots will be required for best results. Growers are requested: —

- A. To consult reference books for these problems.
- B. For earliest spring planting to prepare their beds in the fall, not to touch bed surface at sowing time but to dress with dry peatmoss, sow and cover with peatmoss and shades. Boarding-in of beds will facilitate this procedure.

RODENT REPELLENT — Seed destruction by foraging rodents and birds may be prevented by dusting seeds with Redlead powder. Seeds are being soaked over-night, superficially drained and the Redlead mixed in until all seeds are coated. A little goes a long way.

DAMPING OFF — Soil and seed treatment with commercially available weed-killers and fungicides is recommended. Bed preparation with humus materials and sand to insure a porous, moisture and air retaining surface is essential. Proper covering of seed will help much to alleviate damping-off conditions. It is advisable to cover seeds with a layer of dry soil, (just enough to cover seeds) taken from the walk between beds and applied with a sweeping motion from a, preferably rimless, square shovel. Over this a layer of sand, about $\frac{1}{4}$ inch thick, is applied. The light colored sand surface will reflect heat rays, act as a mulch and moisture retainer, prevent germination of weed seeds to a great extent.

BOOKS

General information as to how and when to plant, as often requested, cannot be given in letter form.

Purchase of suitable books along these lines, we believe, is the best initial investment a beginner can make toward success in his endeavor.

Books No. 11, 12 & 15 can be especially recommended.

1. AZALEAS, KINDS AND CULTURE By HAROLD HUME

Complete treatise covering selection, propagation, soil and soil preparation, planting, cultivation and care of these beautiful shrubs. Book is lavishly illustrated with 68 prints and eight color plates. 199 pages. \$6.00

Books by Alfred C. Hottes—General information, propagation included, about Trees, Shrubs and Perennials:

2. THE BOOK OF TREES — 448 pages — 200 illustrations . . . \$4.00

3. BOOK OF SHRUBS — 448 pages — 191 illustrations . . . \$4.00

4. BOOK OF PERENNIALS — 280 pages — 103 illustrations . . . \$2.75

5. CULTIVATED CONIFERS IN NORTH AMERICA By DR. L. H. BAILEY

404 pages, 48 full page photos, 114 line drawings. Approximately 1000 conifers (species and varieties together) propagation, care, diseases, protection \$13.50

6. FLORIST CROP PRODUCTION AND MARKETING

By KENNETH POST, Ph.D.

The application of scientific facts to the production and marketing of florist cut-flowers, potted plants and bulbs grown in the greenhouse or in the field. 906 pages, profusely illustrated \$10.00

7. HANDBOOK OF THE TREES OF THE

NORTHERN STATES AND CANADA By ROMEYN B. HOUGH

417 pages, 498 photographs showing trunk, leaves, twigs and fruits of each tree \$7.50

8. HORTUS SECOND

By L. H. and ETHEL ZOE BAILEY

A concise dictionary of Gardening and General Horticulture. Apart from general information invaluable as a plant directory alone \$7.50

9. MANUAL OF CULTIVATED TREES AND SHRUBS

By ALRED REHDER

The best reference book available giving detailed description of every hardy tree and shrub in cultivation. 966 pages. \$12.50

BOOKS

10. MODERN ROSES IV

McFARLAND

Compiled by J. Horace McFarland Co., and the American Rose Society. Rose Species described by Dr. George H. M. Lawrence of Bailey Hortorium, Cornell University.

Here is the latest edition of the rose directory consulted by rosarians for more than twenty years. The book is not limited to Modern roses in a strict sense, but also included varieties that are of historical or botanical importance. Straightforward, non-technical descriptions of 6,150 Roses including 300 species. Here you will find:—

Description of the flower and plant, with correct name and all known synonyms, class to which each variety belongs, name of originator and introducer, with date of introduction.

Pronunciation of many variety names, to make every-day usage easier.

Originators' Lists of all roses credited to an individual or firm.

Record of Patented Roses \$7.50

11. **PLANT PROPAGATION PRACTICES**, by James S. Wells. Gives a wealth of information on water, heat, light requirements, shading methods of handling seeds and cuttings. Directions for grafting, layering and division, control of pests and diseases and preparation of propagated material for field planting. Detailed procedures for a select group of plants. 344 p., illus. (1955) \$7.50

12. SEEDING AND PLANTING IN THE PRACTICE OF FORESTRY

By J. W. TOUMEY and C. F. KORSTIAN
A Manual for the guidance of forestry students, foresters, nurserymen, forest owners and farmers.

507 pages, 2nd edition. The best book on the subject. \$8.00

13. STANDARDIZED PLANT NAMES

New second edition. Reference book to 90,000 Common and Scientific names \$10.50

14. WILD FLOWERS AND HOW TO GROW THEM by EDWIN F. STEFFEK

100 Illustration D—50 in Full Color

Described as the first and only practical book on the cultivation of wild flowers, with full information on where to find them, how to identify them positively, how to transplant and propagate.

\$3.95

15 "WOODY-PLANT SEED MANUAL"—with many illustrations and tables. The best new publication in a generation for those who are concerned with the intricate subject of knowledge and treatment of seeds of woody plants comes from the U. S. Department of Agriculture.

Prepared by the Forest Service—Miscellaneous Publication No. 654, for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. Please do not order from us.

Book prices are postpaid in U. S. A. Terms net cash with order.

SEND ORDERS TO

F. W. SCHUMACHER

Sandwich, Mass.

